

Claims

1. Method for monitoring and controlling a number of available decentralized IP budgets of a subscriber in a packet-based communications network during an online assessment of charges for data transmissions, in which the plurality of available IP budgets are each allocated in a data-flow-specific manner to a data flow in a context that can be assigned to the subscriber, and a higher-order control function is provided in a network node of the communications network, said control function charging the data-flow-specific IP budget according to a resource utilization of the data flow based on charge assessment specifications issued by a charge-assessing computer during a resource utilization of a data flow in a context that can be assigned to the subscriber, and effecting a partial or complete transmission of the IP budget between selected data flows on a case-by-case basis.

2. Method according to Claim 1, characterized in that when a data flow is added or removed, the charge assessing computer or the control function requests the return of all allocated IP budgets according to the charge assessment specifications of the charge-assessing computer and reallocates the IP budgets.

3. Method according to one of the above claims, characterized in that the charge assessing computer or the control function requests the return of all allocated IP budgets at a point in time specified by the charge-assessing computer according to the charge assessment specifications of the charge-assessing computer, and reallocates the IP budgets.

4. Method according to one of the above claims, characterized in that some or all of the data-flow-specific IP budget of a first data flow is only transferred by the control unit according to the charge assessment specifications of the charge assessing computer to a second data flow if a data-flow-specific IP budget allocated to the second data flow reaches a threshold value or is completely used up.

5. Method according to one of the above claims, characterized in that some or all of the data-flow-specific IP budget of a first data flow is only transferred by the control unit to a second data flow if the second data flow belongs to a context that can be allocated to an IP address of the same subscriber.

6. Method according to one of the above claims, characterized in that some or all of the data-flow-specific IP budget of the first data flow is only transferred by the control unit to a second data flow if the second data flow belongs to a context that can be allocated to the same IP address of the subscriber.

7. Method according to one of the above claims, characterized in that some or all of the data-flow-specific IP budget of a first data flow is only transferred by the control unit to a second data flow if the second data flow belongs to the same context as the first data flow.

8. Method according to one of the above claims, characterized in that

the charge-assessing computer issues a transfer authorization, within the charge assessment specifications, between a first and a second data flow by marking the first and the second data flow with a common identifier.

9. Method according to one of the above claims, characterized in that a data-flow-specific weighting factor is specified by the charge-assessing computer for charge assessment of a data flow.

10. Method according to Claim 9, characterized in that a data-flow-specific weighting factor is specified by the charge-assessing computer for charge assessment of a data flow by means of a table or pointer to a position in a table.

11. Method according to one of the above claims, characterized in that a GPRS network is used as the packet-based communications network.

12. Method according to Claim 11, characterized in that the control function is located in a GGSN.

13. Method according to one of the above claims, characterized in that the control function requests the return of the IP budgets of all other data flows when a threshold value of a data-flow-specific IP budget of any data flow is reached, and transfers them to the charge assessing computer.

14. Method according to one of the above claims,
characterized in that
part of a data-flow-specific IP budget of a data flow
terminated by the subscriber is transferred by the control
function to one or more existing or new data flows.

15. Method according to one of the above claims,
characterized in that
when a new data flow is added by the control function
according to the charge assessment specifications of the
charge-assessing computer, at least part of the IP budget of
at least one existing data flow is transferred to the new data
flow.